

PTO/SB/08B (10-01)

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				Application Number	10/774,619	
INFOR	RMATION	I DIS	CLOSURE	Filing Date	02/09/2004	
CTATI	EMENT E	εν Δι	PPLICANT	First Named Inventor	David A. Atwood	
יותוע		,, ,,	LIOAIII	Group Art Unit		
	(use as many s	heets as	necessary)	Examiner Name		
Sheet	1	of	3	Attorney Docket Number	434-263	

Cite No.1	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), nublisher, city and/or country where published							
1	DAVID et al. Accelerated hydrolysis of industrial organophosphates in water and soil using sodium perborate. Environmental Pollution. Vol. 105. 1999.							
	pp. 121-128							
2	WEI et al. Chelated Borates: Synthesis, reactivity, and cation formation. Inorg. Chem. Vol. 37. 1998. pp. 4934-4938.	-						
3	WEI et al. Synthesis and Structures of Salen-Supported Borates Containing Siloxides. Inorg. Chem. Vol. 38. 1999. pp. 3914-3918.							
4	BROWN et al. An intramolecularly Stabilized Arylboron Dibromide. Heteroatom Chemistry. Vol. 9. No. 1. 1998. pp 79-83.							
5	YANG et al. Chemical detoxification of Nerve Agent VX. Acc. Chem. Res. Vol. 32. 1999. pp. 109-115.							
6	BLASKO et al. Recent Studies of Nucleophilic General-Acid, and Metal Ion Catalysis of Phosphate Diester Hydrolysis. Acc. Chem. res. Vol 32. 1999.							
	pp. 475-484							
7	OIVANEN et al. Kinetics and Mechanisms for the cleavage and Isomerization of the Phosphodiester bonds of RNA by bronsted acids and Bases. Chem. Rev.							
	Vol. 98. 1998. pp. 961-990.							
8	GAJDA et al. Highly efficient phosphodiester hydrolysis promoted by dinuclear copper (II) complex. Inorg. Chem. Vol. 40. 2001. pp. 4918-4927.	_						
	2 3 4 5 6	pp. 121-128 WEI et al. Chelated Borates: Synthesis, reactivity, and cation formation. Inorg. Chem. Vol. 37. 1998. pp. 4934-4938. WEI et al. Synthesis and Structures of Salen-Supported Borates Containing Siloxides. Inorg. Chem. Vol. 38. 1999. pp. 3914-3918. BROWN et al. An intramolecularly Stabilized Arylboron Dibromide. Heteroatom Chemistry. Vol. 9. No. 1. 1998. pp 79-83. YANG et al. Chemical detoxification of Nerve Agent VX. Acc. Chem. Res. Vol. 32. 1999. pp. 109-115. BLASKO et al. Recent Studies of Nucleophilic General-Acid, and Metal Ion Catalysis of Phosphate Diester Hydrolysis. Acc. Chem. res. Vol 32. 1999. pp. 475-484 OIVANEN et al. Kinetics and Mechanisms for the cleavage and Isomerization of the Phosphodiester bonds of RNA by bronsted acids and Bases. Chem. Rev. Vol. 98. 1998. pp. 961-990. GAJDA et al. Highly efficient phosphodiester hydrolysis promoted by dinuclear copper (II) complex. Inorg. Chem. Vol. 40. 2001. pp. 4918-4927.						

1	Examiner	T. A-	Solola	Date	7-1-05
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TATE	EMENT RY	7 A	PPLICANT	First Named Inventor	David A. Atwood	
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Sheet	2	of	3	Attomey Docket Number	434-263	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS									
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Yo	9	JONES et al. Enhanced base hydrolisis of coordinated phosphate esters: the reactivity of an unusual cobalt (III) amine dimer. J. Am. Chem. Soc. 1984.Vol.							
		pp. 7807-7819.							
	10	VANCE et al. Functional group convergency in a binuclear dephosphorylation reagent. J. Ame. Chem. Soc. Vol. 115. 1993. pp. 12165-12166.							
	11	MCCUE et al. Hydrolysis of a model for the 5'-cap pf mRNA by dinuclear copper (II) and Zinc (II) Complexes. Rapid hydrolysis by four copper (II) ions.							
		Inorg. Chem. Vol. 38. 1999. pp. 6136-6142.							
	12	SCRIMIN et al. Comparative reactivities of phosphate ester cleavages by metallomicelles. Langmuir. Vol. 12. 1996. pp. 6235-6241.							
	13	YAMAMI et al. Macrocyclic heterodinuclear ZnIIPbII complexes: synthesis, structures, and hydrolytic function toward Tris (p-nitrophenyl) phosphate.							
		Inorg. Chem. 1998.Vol. 37. pp. 6832-6838.							
	14	KAMINSKAIA et al. Reactivity of u-hydroxodizinc (II) centers in enzymatic catalysis through model studies. Inorg. Chem. Vol. 39. 2000. pp. 3365-3373.							
	15	CHAPMAN et al. Selective hydrolysis of phosphate esters, nitrophenyl phosphates and UpU, by dimetric zinc complexes depends on the spacer length. J. Ame. Chem. Soc. 1995. Vol. 117. pp. 5462-5469.							
	16	MOLENVELD et al. Highly efficient phosphate diester transesterification by a Calix [4] arene-based dinuclear zinc (II) catalyst. J. Am. Chem. Soc. Vol 119. 1997. pp. 2948-2949.							

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40	17	BENTON et al. The cleavage of ethers with boron bromide. I. Some common ether. J. Am/ Chem. Soc. Vol. 64. 1942. pp. 1128-1129.								
	18	KIM et al. Direct conversion of silyl ethers into alkyl bromides with boron tribromide. J. Org. Chem. Vol. 53. 1988. pp. 3111-3113.								
	19	BAZZICALUPI et al. Carboxy and diphosphate ester hydrolysis by a dizinc complex with a new alcohol-pendant macrocycle. Inorg. Chem. 1999.Vol. 38.								
		pp. 4115-4122.								
	20	EMBER LOIS. EPA Destroying chemical arms: No easy task. C & EN. August 30, 1999. pp. 11-12								
V	21	RANU et al. Dealkylation of ethers. A review. Organic preparations and procedures int. Vol. 28. No. 4. pp. 371-409.								
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